

**What is claimed is:**

1. A digital subscriber line (DSL) compatible plain old telephone service (POTS) line card to interface a telecommunications switching system to a subscriber over a two-wire subscriber line, said line card comprising:

5 means for detecting whether a DSL line card is connected to said subscriber line; and

a digital signal processor responsive to said means for detecting configured to process voice-band signals with a first set of parameters if said DSL line card is connected to said subscriber line and configured to process voice-band signals with a  
10 second set of parameters if said DSL line card is not connected to said subscriber line.

2. A DSL-compatible POTS line card in accordance with claim 1 wherein said means for detecting is configured to detect a DSL line card connected to said subscriber line by measuring impedance in said subscriber line.

3. A DSL-compatible POTS line card in accordance with claim 2 wherein a DSL  
15 line card is connected when said impedance indicates the presence of approximately 100 ohms at DSL Frequencies in parallel with the subscriber load.

4. A DSL-compatible POTS line card in accordance with claim 1 wherein said means for detecting is configured to detect a DSL line card connected to said subscriber line by generating a voice band tone, sending the tone on said subscriber line and  
20 measuring a reflected energy, wherein a DSL line card is detected when said reflected energy is below a threshold.

5. A DSL-compatible POTS line card in accordance with claim 4 wherein said voice band tone is selected from the group of 2.6, 3.0 and 4.0 kHz.

6. A DSL-compatible POTS line card in accordance with claim 1 wherein said  
25 means for detecting is configured to detect a DSL line card connected to said subscriber line by generating a tone above voice band, sending the tone on said subscriber line and measuring a return loss, wherein a DSL line card is detected when said return loss is below a threshold.

7. A DSL-compatible POTS line card in accordance with claim 6 wherein said  
30 tone is selected from the group of 16 and 24 kHz.

8. A DSL-compatible POTS line card in accordance with claim 1 wherein said first set of parameters adjusts a frequency response of said subscriber line.

9. A DSL-compatible POTS line card in accordance with claim 1 wherein said first set of parameters adjusts a return loss of said subscriber line.

5 10. A DSL-compatible POTS line card in accordance with claim 1 wherein said first set of parameters adjusts a trans-hybrid loss of said POTS line card.

11. A method for use in a DSL-compatible POTS line card connected to a subscriber line, said method comprising the steps of:

determining whether a DSL line card is connected to said subscriber line;

10 loading a digital signal processor with a first set of parameters if a DSL line card is connected to said subscriber line; and

loading a digital signal processor with a second set of parameters if a DSL line card is not connected to said subscriber line.

12. A method in accordance with claim 11 wherein said step of determining occurs periodically.

13. A method in accordance with claim 11 wherein said step of determining comprises the substeps of:

sending a tone on said subscriber line;

measuring a reflection of said tone; and

20 basing said determination on a parameter of said reflection.

14. A method in accordance with claim 11 wherein said step of determining comprises:

measuring energy in a DSL frequency range and basing said determination on the presence of energy.

25 15. A method in accordance with claim 11 wherein said step of determining comprises:

monitoring said subscriber line for DSL pilot tone.

16. A method in accordance with claim 11 wherein said step of determining comprises:

30 measuring an impedance of said subscriber line.